### Implementation of the California Renewables Portfolio Standard

Assembly Committee on Utilities and Commerce Hon. Lloyd E. Levine, Chair

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#### **Overview**

- Since the 1980s, SCE has been the nation's leader in renewable procurement
  - SCE buys about 13 billion kWh per year, more than any other utility, which represents about 1/6 of the nation's renewable energy
  - SCE buys over 90 percent of the solar energy produced in the U.S.
- SCE continues to lead the way in renewable procurement
  - Since 2002, SCE has conducted three solicitations for renewable power and is now completing a fourth
  - On March 12, SCE commenced its fifth RPS solicitation
  - SCE has signed 25 new contracts, and when fully operational, will represent annual deliveries of up to almost 14 billion kWh
- SCE leads the development of much-needed transmission
  - SCE will advance \$1.7 billion to construct transmission to access 4,500 MW of Tehachapi wind resources
  - SCE is seeking CPUC authority to study the feasibility of building transmission to access resource rich areas in Western Nevada, Mammoth Lakes, the Salton Sea area, and San Bernardino County

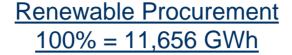


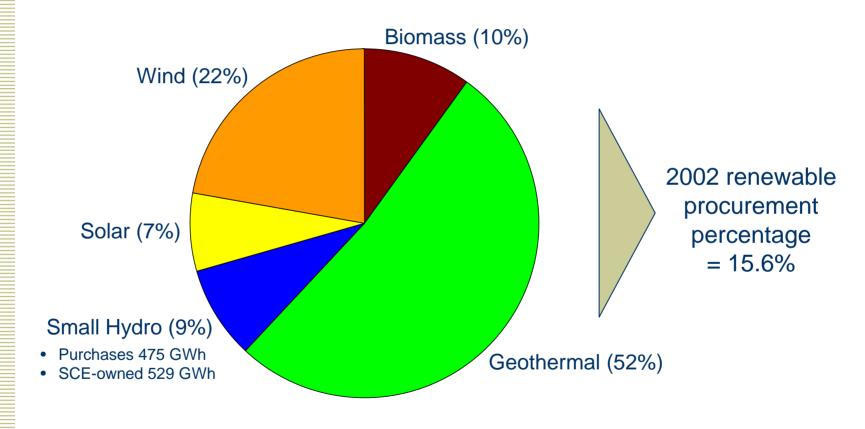
### **Agenda**

- SCE's procurement progress since 2002
- Projection of annual renewable production from signed contracts
- Timing for new contracts
- Actions SCE is taking to work towards the RPS goals
- Actions that the Legislature and Regulators can take to facilitate meeting the State's goals



#### Renewable Percentage in 2002

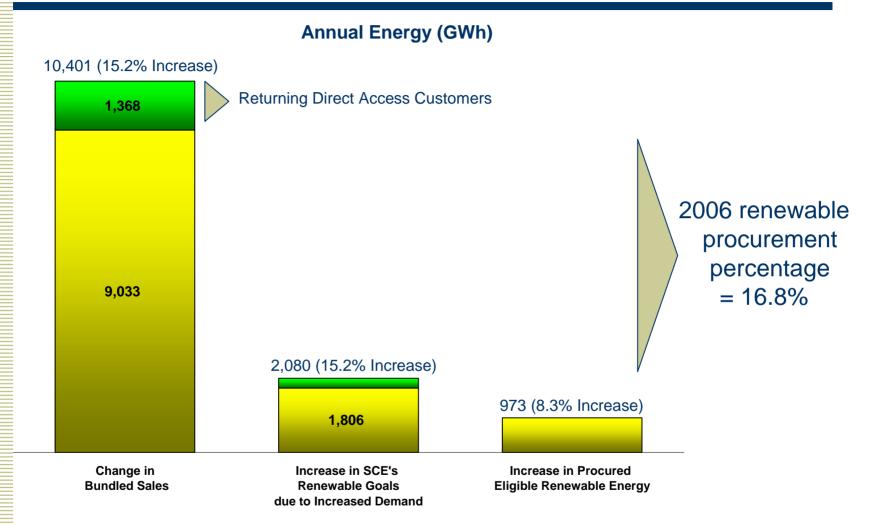






Note: The RPS compliance percentage is calculated by dividing current year's (2002) renewable procurement by prior year's (2001) retail sales.

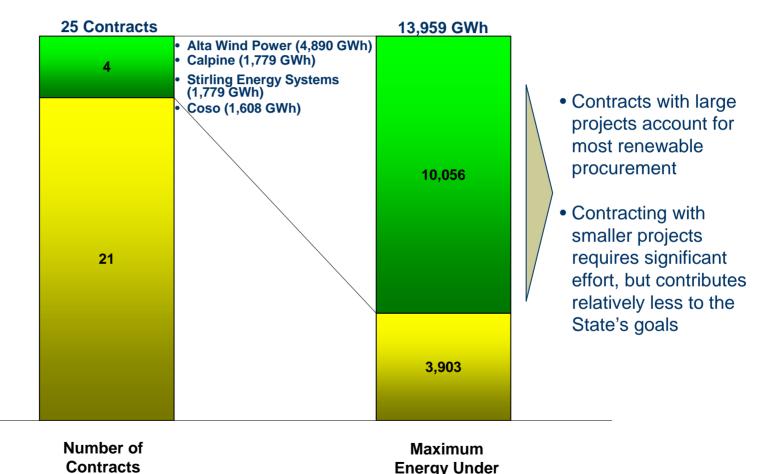
#### Renewable Procurement Changes Since 2002





Note: The RPS compliance percentage is calculated by dividing current year's (2006) renewable procurement by prior year's (2005) retail sales.

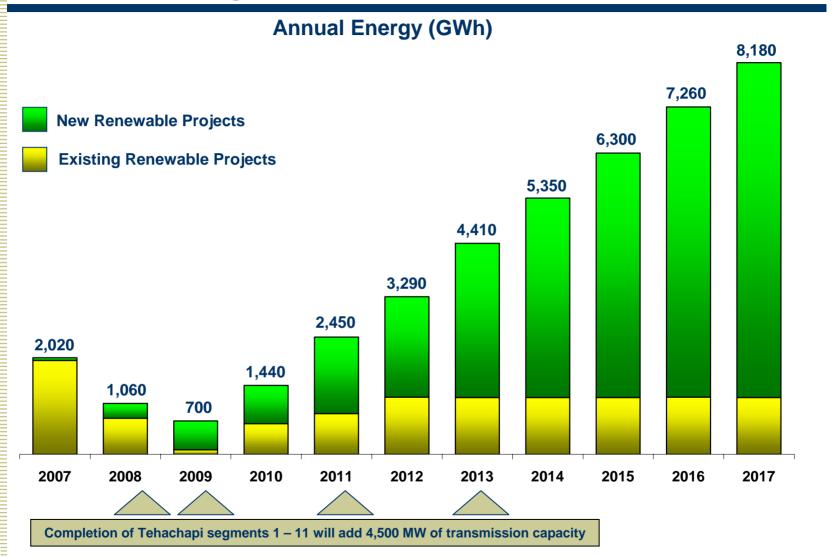
## Eligible Renewable Procurement Activity 2002 to Present





Contract

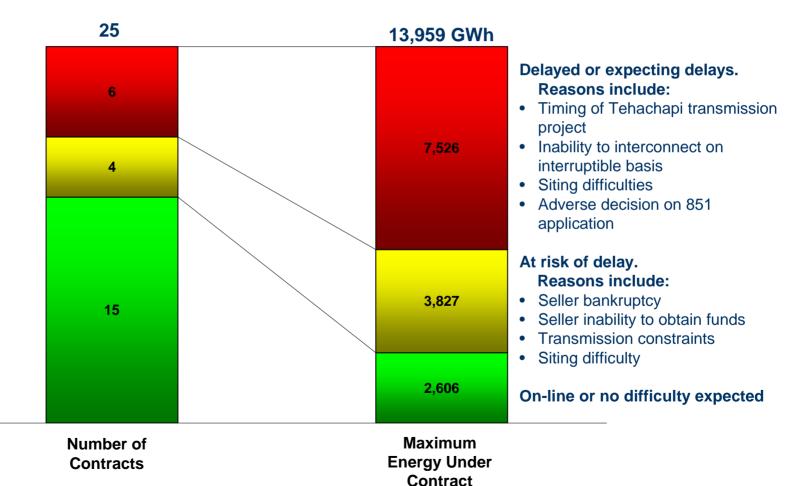
# Projected Annual Renewable Production from Contracts Signed Since 2002





Notes: Assumes no contract expansion options are exercised. Does not include contracts currently under discussion.

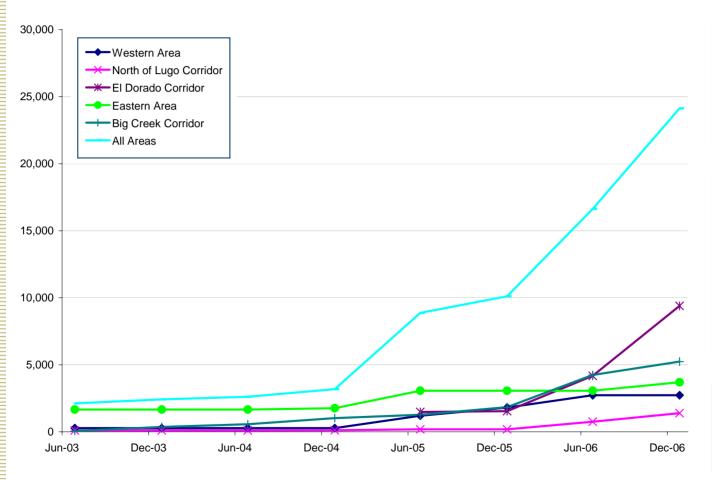
#### **Renewable Contract Timing**





#### **CAISO Interconnection Queue**

#### By Electrical Network Area, in MW (Summer Maximum)



FERC's rules govern CAISO requirements for fees, study requirements, and timelines

It is relatively easy and inexpensive for generators to enter the queue, but exiting generators cause restudies and delays

Fixes to the queue must be directed to FERC



Source: SCE Generation Interconnection Database

### **SCE Actions In Contracting**

- SCE is working to finalize contracts with developers from its 2006 RPS solicitation
- SCE commenced its fifth RPS solicitation on March 12, 2007
- SCE will continue to initiate annual RPS solicitation to procure additional renewable energy to meet the State's goals
  - No set minimum or maximum energy per year
  - No required on-line dates
- SCE continues to work with developers to pioneer innovative contract terms and structures, such as the landmark Alta Windpower contract



## Actions SCE Is Taking To Enhance Bid Responses And Improve Project Viability

- SCE held a "lessons learned" workshop with developers in May 2006 to
  - Identify ways to encourage a more robust response to
    - RPS solicitations overall
    - Requests for repowers
  - Discuss in detail and answer questions about how the bid evaluation process works
  - Provide a primer and answer questions on the CAISO's interconnection process
- As a result of this "lessons learned" workshop, SCE has made the following changes:
  - Creating an option to have SCE act as schedule coordinator
  - Broadening credit and collateral options (three pricing points based on months of revenue)
  - Lowering development security deposit for intermittent resources (50 percent reduction)
  - Permitting half of development security deposit to be covered by assets rather than cash
  - Using an indexed based pricing structure to address changes in wind turbine prices
  - Establishing a wind repowering structure that has yielded three new contracts
- These changes have been received favorably and recognized by independent power companies
- SCE actively shepherds projects through the interconnection process
  - Participates in team meetings with the developer and interconnection group
  - Amends contract language, as needed, to accommodate interconnection challenges
  - Advocates projects in local communities and with city/county officials



## Actions SCE Is Taking To Help The State Meet Its Broader Renewable Goals

- In 2005, SCE sought authority for a renewable trunk line at FERC
  - FERC rejected SCE's proposal
  - CAISO will likely file a similar proposal at FERC
- SCE is seeking CPUC approval to build a \$1.7 billion transmission project in the Tehachapi region to access 4,500 MW of untapped wind potential
  - The project was approved by CAISO in January 2007
- SCE is funding transmission interconnection studies/environmental studies for projects with contracts
  - Accelerates regulatory approval by up to a year
  - Includes studies for transmission project with procurement contracts
  - SCE will evaluate upfront funding of expenditures for engineering, procurement, and construction of transmission facilities needed to access renewable resources
- SCE is working with the CAISO to relax its "no-new congestion" policy for renewable resources until new transmission can be built to eliminate congestion
- SCE filed an advice letter with the CPUC requesting approval of expenditures to evaluate the feasibility of transmission projects to interconnect four renewable-rich areas in Southern California and Western Nevada.



# Regulatory and Legislative Actions to Support State's Goals

- Prompt regulatory approval of transmission projects and renewable contracts
  - Tehachapi
    - CPUC approval of CPCN for segments 1 − 3 by March 2007
    - CPUC approval of CPCN for segments 4 11 by January 2009
  - Timely CPUC approval of SCE advice letter seeking authority to recover costs for transmission feasibility studies
  - Implementation of expedited CPUC process for reviewing and approving new renewable contracts
- Collaborate with CAISO and FERC to promote renewable development
  - Facilitate early interconnection of renewable projects
  - Revisit interconnection queue policies
- Consider legislation authorizing regional (WECC) RECs for California RPS compliance to increase supply and development opportunities and reduce overall program cost
- Continue to allow counterparties to develop mutually acceptable contract terms consistent with current market conditions
  - Developers need flexibility to accommodate different technologies and business arrangements
  - Prescriptive contract terms chill innovation, reduce project viability, and increase customer costs

